

ARTOBOL'EVSKIY, I.I.; GERTS, Ye.V.; KOBRINSKIY, A.Ye; RAYEVSKIY, N.P.

Theoretical and experimental investigation of pneumatic drive for
welding machines. Trudy Sem. po teor. mash. 14 no.56:5-19 '55.
(Pneumatic machinery) (Welding) (MIRA 8:?)

KOBRINSKIY, A.Ye., kandidat tekhnicheskikh nauk; GERTS, Ye.V., kandidat
tekhnicheskikh nauk.

Dynamics of pneumatic piston drives. Vest.mash. 35 no.12:7-11
'55. (MLRA 9:5)
(Machine tools--Pneumatic driving)

GERTS, Ye.V.

Some aspects of design and classification of pneumatic devices.
Trudy Inst.mash.Sem.po teor.mash. 16-no.63:5-16 '56. (MIRA 10:1)
(Pneumatic control)

BEZHANOV, Boris Nikolayevich; RATNER, A.I., inzhener, retsenzent; ~~GENS, Ye.V.~~,
kandidat tekhnicheskikh nauk, redaktor; SIMONOVSKIY, N.Z., redaktor
izdatel'stva; SPERANSKAYA, O.V., tekhnicheskiy redaktor.

[Pneumatic machinery] Pnevmaticheskie mekhanizmy. Moskva, Gos.
nauchno-tekhn.izd-vo mashinostroi.lit-ry, 1957. 251 p. (MIRA 10:11)
(Pneumatic machinery)

GERTS, Ye. V.

Static characteristics of pneumatic membrane units. Trudy Inst. mash.
Sem. po teor. mash. 17 no. 66:52-67 '57. (MIRA 11:1)
(Pneumatic machinery)

G.R.Ts, Yz v.

25(2)

PHASE I BOOK EXPLOITATION SOV/2563

Akademiya nauk SSSR. Institut mashinovedeniya. Seminar po teorii mashin i mekhanizmov

Trudy, tom 18, vyp. 71 (Transactions of the Institute of Mechanical Engineering, Academy of Sciences, USSR. Seminar on the Theory of Machinery and Mechanisms, Vol 18, No. 71) Moscow, Izd-vo AN SSSR, 1958. 89 p. Errata slip inserted. 2,500 copies printed.

Ed. of Publishing House: M.L. Dobashits; Tech. Ed.: N.F. Yegorova; Editorial Board: I.I. Artobolevskiy, Academician (Resp. Ed.); G.G. Baranov, Doctor of Technical Sciences, Professor; V.A. Gavrilenco, Doctor of Technical Sciences, Professor; V.A. Zinov'yev, Doctor of Technical Sciences, Professor; A.Ye. Kobrinskiy, Doctor of Technical Sciences; N.I. Levitskiy, Doctor of Technical Sciences, Professor; N.P. Rayevskiy, Candidate of Technical Sciences; L.N. Reshetov, Doctor of Technical Sciences, Professor; and M.A. Skuridin, Doctor of Technical Sciences, Professor.

PURPOSE: This collection of articles is intended for scientific research workers and engineers.

Card 1/4

Transactions (Cont.)

SOV/2563

COVERAGE: This collection of articles deals with the following topics: thread control in textile machines, pneumatic devices with diaphragms, resonance in centrifugal pumps, the dynamics of electrically driven machinery, synthesis of four-link transmission mechanisms, and the design of link mechanisms. No personalities are mentioned. References follow several of the articles.

TABLE OF CONTENTS:

Preface

3

Kostitsyn, V.T. (Deceased) [Doctor of Technical Sciences, Professor]. Design of a Disk-type Thread Governor

4

The author points out the interdependence between the tension in the thread and the angle of contact between thread and spindle.

Gerts, Ye.V. [Candidate of Technical Sciences]. Dynamic Characteristics of Pneumatic Diaphragm-type Devices

11

This theoretical and experimental investigation deals with the dynamic characteristics of a single-action pneumatic device with a plane diaphragm.

Card 2/4

Transactions (Cont.)

SOV/2563

Examples of the calculations involved are presented.

Kononenko, V.O. [Doctor of Technical Sciences]. Resonance Properties of a
Centrifugal Vibrator

22

Equations for the motion of a centrifugal vibrator are presented, and the
basic interrelations between the parameters of the system and the regimes
of the motion are established. Simplified geometrical criteria for steady
motion and the effect of mechanical characteristics are presented.

Bykhovskiy, M.L. [Doctor of Technical Sciences]. Problem of the Dynamics of
Machinery With Electric Drives

43

The author derives a general equation for investigating the dynamics of d-c
electromechanical systems, with consideration being given to electromagnetic
processes in the motor. A comparison is made with other simplified methods which
take only the static characteristics of the motor into consideration.

Cherkudinov, S.A., and N.V. Speranskiy. Synthesis of Four-bar Linkage Mechanisms
by the Method of Interpolative Approximation With One Node of High Multiplicity 60

This article is the continuation of an article published by the authors in

Card 3/4

Transactions (Cont.)

SOV/2563

Volume I, Number 67, 1957, under the same title. Methods developed in the first part are applied to the synthesis of the slider-crank mechanism.

Grodzenskaya, L.S. Design of Linkage Mechanisms for a Given Time of Dwell of the Follower Link

69

Methods for designing link mechanisms with a dwell in the extreme position (Chebyshev mechanisms) are discussed.

AVAILABLE: Library of Congress

GO/jb

Card 4/4

12-19-59

(GER TS, 42. V)

PHASE I BOOK EXPLOITATION SOV/2181

- Akademija nauk SSSR. Komissija po tekhnicheskij massnostroyenija i upravleniye masinami i rukh protsessami. II. Privatnoe izdatelstvo. Komissija po tekhnicheskij massnostroyenija i upravleniye masinami i rukh protsessami. Komissija po standardizacii i metrologii. Minsk, 1962. 120 pp. Errata slip inserted. \$1000 copies printed.
- Ed. V.I. Dushkin, Academician; Ed. of Publishing House: D.M. Ioffe; Tech. Ed.: V.P. Kuz'min.
- PURPOSE: This book is intended for engineers dealing with automation of various machinebuilding processes.
- COVERAGE: This is the second volume of transactions of the Second Conference on Overall Organization and Automation of Manufacturing Processes held September 25-26, 1956. The present volume consists of three parts. The first dealing with automation of engineering measuring methods. The subjects discussed include automatic control of dimensions of machined parts, inspection methods for automatic production lines, inspection of inspection devices, application of electronics in calculating linear measuring processes, and methods for automatic inspection of bearing races. The second part deals with automatic drives and control systems for process machinery, including application of digital computers in the circuit of mechanical drive, machine tools, reliability of relay systems, application of servotube frequency converters in control systems, design of automatic motor speed regulators, starters and timers, use of magnetic starters, hydraulic drives, and other topics. The third part deals with dynamics of automatic vehicles and automatic production lines. The entire third part deals with linkage, indexing, and general methods of reducing friction drives, automatic indexing devices, dynamic characteristics of products, drives for automatic production lines, and methods of design and adjustment of cars. No references are mentioned. There are no references.
- REFERENCE: Ye. A. Dynamics and Type of Wear of Generalized Mechanisms 210
- Shokhina, E.I. Study of Indirect Mechanisms for Tunnels and Drums of Automatic Machines 222
- Charkadiarov, S.A. Linkage Mechanics of Heavy-duty Cranes 251
- Bekov, G.A. Controlled Friction Drives Made by Tikhonov 274
- Prozor, V.P. Some Problems in the Theory of Loading and Protection Devices 278
- Revidov, R.V. Automatic Feeding of Piece Stock into Workshops 292
- Kazimirov, N.I. Vibratory Loaders for Machine Tools 311
- Bogdan, P.I. Experience gained by the Automobile Plant of Likhachev in Developing Standardized Auxiliary Components for Large-Scale Auxiliary Operation in Metalworking Machine Tools 326
- Gerts, Ya.V. Designing Diaphragm-type Pneumatic Drives 341
- Bron, L.S. Standard Auxiliary Devices for Automatic Lines 352
- Bogut, P.L. Problems of Profile Design and Gas Accuracy for Process Machinery in Various Industries 361

GERTS, Ye.V.; KREYNIN, G.V.

Determining the performance of membrane-equipped pneumatic units. Trudy Inst.mash.Sem.po teor.mash. 19 no.75:49-67
'59. (MIR 13:1)

(Pneumatic machinery)

PHASE I BOOK EXPLOITATION

SOV/5175

Gerts, Yelena Vasil'yevna, and German Vladimirovich Kreyzin

Teoriya i raschet silovykh pnevmaticheskikh ustroystv (Theory and Design of Pneumatic Devices for Actuation of Machines) Moscow, Izd-vo AN SSSR, 1960. 177 p. Errata slip inserted. 4,500 copies printed. (Series: Problemy teorii mashin.)

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya.

Editorial Board: Resp. Ed.: I. I. Artobolevskiy, Academician; A. A. Blagonravov, Academician, N. G. Bruyevich, Academician, V. I. Dikushin, Academician, S. V. Serensen, Academician of the Academy of Sciences UkrSSR, S. V. Pinegin, Doctor of Technical Sciences, N. I. Levitskiy, Doctor of Technical Sciences, Professor, F. M. Dimentberg, Doctor of Technical Sciences, A. Ye. Kobrinskiy, Doctor of Technical Sciences, N. P. Rayevskiy, Candidate of Technical Sciences; Corresponding Secretary: A. P. Bessonov, Candidate of Technical Sciences; Resp. Ed.: I. I. Artobolevskiy, Academician; Ed. of Publishing House: G. B. Gorshkov; Tech. Ed.: I. A. Makogonova.

Card 1/7

Theory and Design (Cont.)

SOV/5175

PURPOSE: This book is intended for engineers dealing with pneumatic systems used in automatic production control.

COVERAGE: The authors investigate basic problems connected with the theory of piston- and diaphragm-type pneumatic actuating devices used in automatic machines and production lines. The designs of such installations are considered. Electronic computers were used for solving equations required for calculating the pneumatic mechanisms described. The results of numerous calculations made by the authors on the model MN-M electronic analog computer and on the "Strela" and "Ural" digital computers are presented in the form of graphs, tables, and nomograms. These data can also be used in the calculation of other pneumatic devices of the same type. The experiments were conducted in the Laboratory for Mechanisms of Automatic Machines of the Institut Mashinovedeniya (Institute of Machine Science), the Machine-Tool Laboratory of the Stankostroitel'nyy zavod imeni S. Ordzhonikidze (Machine-Tool Plant im. S. Ordzhonikidze), and in the Laboratory for Pneumatic Accessories of the Plant "Elektrik" (The Electrician).

Card 2/7

Theory and Design (Cont.)

SOV/5175

The constructions done by the spetsial'noye konstruktorskoye byuro No. 1 po stankostroyeniyu Mosgorsovarkhoza (Special Machine-Tool Design Office No.1 of the Mosgorsovarkhoz), by the nauchno-issledovatel'skiy institut tekhnologii avtomobil'noy promyshlennosti (Technological Scientific Research Institute of the Automobile Industry), and by the eksperimental'nyy nauchno-issledovatel'skiy institut metallorezushchikh stankov (Experimental Scientific Research Institute of Metal-Cutting Machine Tools) were tested and results obtained by these institutes were used. Chapters 1, 3, and 4 were written by Ye. V. Gerts.

G. V. Kreynin wrote Chapters 2, 5, and 6. The authors thank M. L. Bykhavskiy, Doctor of Technical Sciences, for his work with the analog computer; V. D. Kozhin and B. P. Vilkov, Senior Laboratory Technicians, for participating in the investigation described in Chapter 6; and I. I. Artobolevskiy and A. A. Blagonravov, Academicians, and N. I. Levitskiy, Doctor of Technical Sciences, for their assistance and interest during the preparation of the book. There are 126 references: 108 Soviet, 13 English, 3 German, 1 Czech, and 1 French.

Card 3/7

PHASE I BOOK EXPLOITATION SOV/4487

Akademiya nauk SSSR. Institut mashinovedeniya. Seminar po teorii mashin i
mekhanizmov

Trudy, t. 20, vyp. 80 (Transactions of the Institute of the Science of Machines,
Seminar on the Theory of Machines and Mechanisms, Vol. 20, No. 80).
Moscow, 1960. 80 p. Errata slip inserted. 3,500 copies printed.

Editorial Board: I.I. Artobolevskiy (Resp. Ed.) Academician, G.G. Baranov,
Professor, Doctor of Technical Sciences, M.L. Bykhovskiy, Doctor of Technical
Sciences, V.A. Gavrilenco, Professor, Doctor of Technical Sciences, V.A.
Zinov'yev, Professor, Doctor of Technical Sciences, A.Ye. Kobrinskiy, Doctor of
Technical Sciences, N.I. Levitskiy, Professor, Doctor of Technical Sciences, N.P.
Rayevskiy, Candidate of Technical Sciences, L.N. Reshetov, Professor, Doctor of
Technical Sciences, and M.A. Skuridin, Professor, Doctor of Technical Sciences;
Ed. of Publishing House: V.A. Sokolova-Chestnova; Tech. Ed.: S.G. Tikhomirova.

PURPOSE: This collection of articles is intended for technical personnel interested
in the theory of machines and mechanisms.

Card 1/4

Transactions of the Institute (Cont.)

SOV/4487

COVERAGE: The collection contains four articles submitted to the Seminar on the Theory of Machines and Mechanisms. The foreword to the collection was written by I.I. Artobolevskiy, Academician, Scientific Director of the Seminar. Included in the foreword are summaries of the four articles. References accompany three of the articles. All references are Soviet, with the exception of one translation from English.

TABLE OF CONTENTS:

Foreword

3

Sklyadnev, B.N. Application of Chebyshev's Method to the Design of a Conical Mechanism for the Measurement of Areas by a Light Beam 5

The author describes methods for determining optimum parameters of a conical mechanism by using Chebyshev's theory of the optimum approximation of functions. The "conical mechanism" is a cone-shaped instrument with three optical tubes and a photomultiplier tube. The "conical mechanism" is used for constructing pulse-counting devices for more accurate measuring and checking of plane figures.

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Transactions of the Institute (Cont.)

SOV/4487

Vasil'chikov, N.V. Measurement of Displacements by Means of Radioactive Isotopes in Closed Containers Under Pressure

23

The author discusses the problem of recording linear displacements of machine parts not connected with others (e.g., piston of an electro-pneumatic hammer).

Gerts, Ye. V., and G.V. Kreyzin. Design of the Double-Acting Pneumatic Piston-Type Actuator

36

The authors describe the method of designing (using dimensionless parameters) a double-acting pneumatic piston-type actuator working with pressures of 5 - 6 absolute atmospheres. The methods used in experimental investigation are examined and a comparative analysis of design and experimental data is given.

Lyudmirskaya, I.B. Application of Digital Computers for the Synthesis of Four-Bar Linkage-Type Computing Mechanisms

64

The author emphasizes the importance of digital computers in making it possible to develop new methods for finding the acceptable variant of

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Transactions of the Institute (Cont.)

SOV/4487

a mechanism. Two methods of the synthesis of four-bar linkages are discussed and preparatory work for their solution by computers is described. The author concludes that the method of the quickest triggering action may be used to determine a kinematically sound mechanism.

AVAILABLE: Library of Congress

Card 4/4

VK/wrc/gmp
11-18-60

GERBS, Ye.V.; KREVINN, G.V.

Design of a pneumatic piston unit with two-way action. Trudy
Inst.mash.Sem.po teor.mach. 20 no.80;36-63 160.
(MIRA 13:9)
(Pneumatic control)

S/586/61/022/085/002/003
D234/D304

AUTHORS

Gerts, Ye.V., Kreyzin, G.V., and Polyakova, M.V.

TITLE

Use of electronic computers for the design of pneumatic devices

SOURCE

Akademiya nauk SSSR, Institut mashinovedeniya, Seminar po teorii mashin i mekhanizmov, Trudy, v. 22 no. 85/86, Moscow, 1961, 68-86.

TEXT The authors deal only with the interval of displacement of the piston and two sided pneumatic device with constant load. The equations of motions of the device are quoted from previous papers and the results of solution by an electronic simulating device and by a digital Strela computer are considered. Oscillograms and graphs of the solutions in dimensionless quantities are given for several values of parameters and analyzed in detail. It is stated that the solutions by simulating devices were checked on a digital computer and found to be accurate up to 5-7%. The graphs and oscillograms allow the time of piston displacement to be determined for a wide range of constructions of pneumatic devices. There are 11 figures, 1 table and 9 Soviet-bloc references.

SUBMITTED November 22, 1960

Card 1/1



GERTS, Ye. V.; LEVITSKY, N.I.; TSURGANOVA, Ye.A.(Moscow)

"Theory of pneumatic and hydraulic systems of automatic machines".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

GERIS, Ye.V.; KREYMIN, G.V.; SHCHERBAKOV, V.I., inzh., rezensent;
GORBOV, P.S., inzh., red.

[Dynamics of pneumatic drives in automatic machinery] Di-
namika pnevmaticheskikh privodov mashin-avtovratev. Mo-
skva, Izd-vo "Mashinostroenie," 1964. 236 p.

(MIAA 17:6)

Дж. М. Борисов (Марков), ЕРГИТИН, И. В. (Богдан)

Investigating the unsteady motion of the piston of a pneumatic device. Izv. AN SSSR. Mekh. i mashinostr. no. 3:15 (1964) My-Je
(MIRA 17:7)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514920015-4

14-16, 217, 1964, 1000

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APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514920015-4"

ACCESSION NR: AT4042438

8/0000/64/000/000/0067/0075

AUTHOR: Gerts, Ye. V., Kreyzin, G. V.

TITLE: Some problems in the dynamics of the control devices of pneumatic systems of mechanical automata

SOURCE: Vsesoyuznoye soveshchaniye po pnevmo-gidravlicheskoy avtomatike. 5th, Leningrad, 1962. Pnevmo- i gidroavtomatika (Pneumatic and hydraulic control); materialy* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 67-75

TOPIC TAGS: automation, pneumatic control system, automatic control system, mechanical automation, pneumatic drive, pneumatic distributor, slide valve

ABSTRACT: The results of a theoretical and experimental investigation into the dynamics of the control devices (air distributors, logical elements) of pneumatic systems of mechanical automata are presented. Although these systems make use of distributors with electric, pneumatic and electro-pneumatic drive, the authors restrict their study to distributors with pneumatic drive only. The slide valve is considered as the usual working element of the distributor pneumatic drive assembly. Its operation is described, and the equations characterizing the pressure and antipresure in the slide valve cavities are

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ACCESSION NR: AT4042438

derived. The problem of the filling or emptying of a tube through one end with a blind chamber of small volume present at the other end is considered, and the law governing the change in pressure in the slide valve control cavity, located at the end of the tube, is analyzed. The critical pipeline length for valves with two-way pneumatic drive is determined. A detailed analysis is presented on oscillograms of type ENIMS distributor, along with certain other oscillograms plotted during the testing of distributors with different pipeline lengths in the control lines (from 0.5 to 50 m) and different through sections for the tube (0.3, 0.4 and 0.5 cm). Logical elements of the OR channel and the membrane relay type are discussed. The authors demonstrate that, in many cases, a dynamic analysis of a pneumatic control system is possible merely by considering the filling and emptying of constant-volume vessels through long pipelines. Org. art. has: 10 formulas and 6 figures.

ASSOCIATION: none

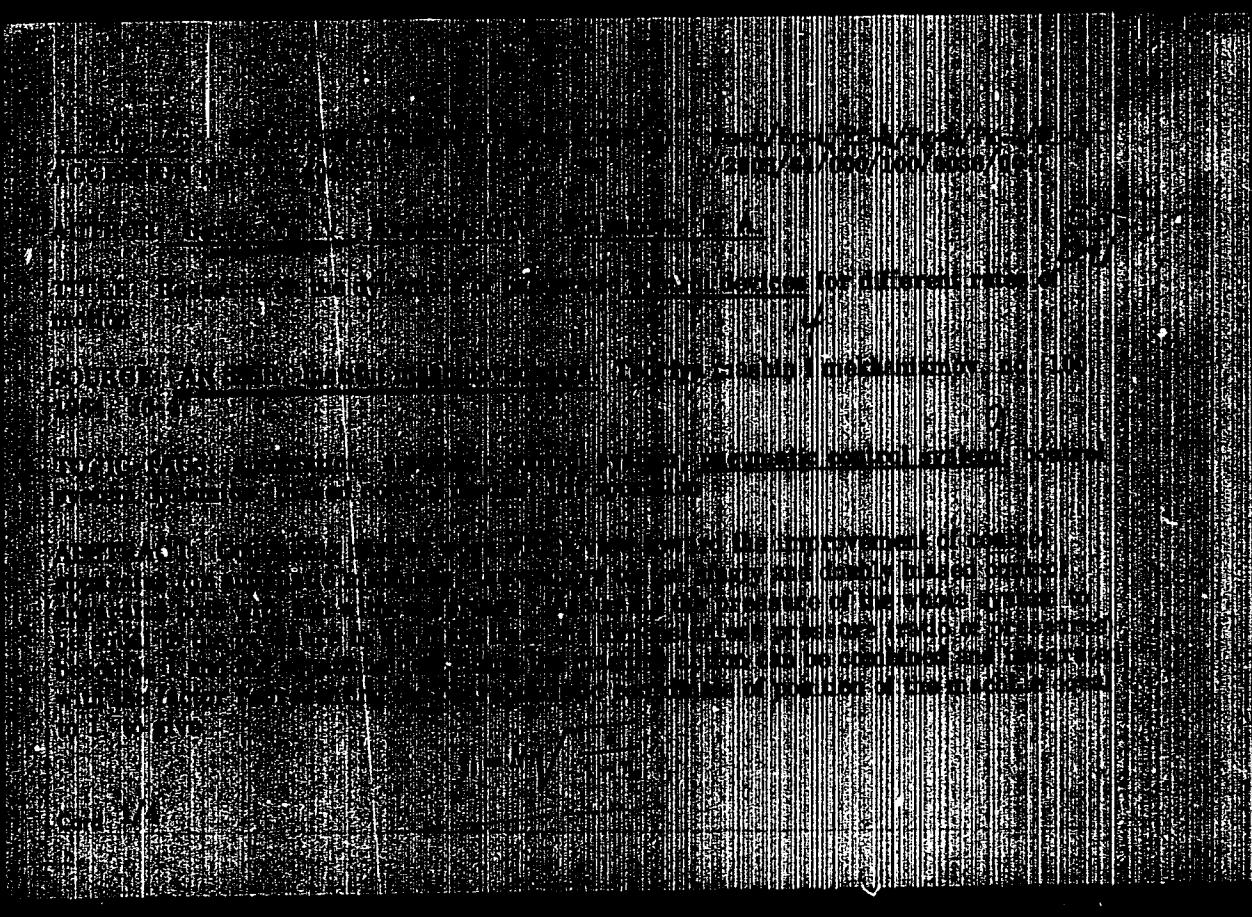
SUBMITTED: 29Jan64 ENCL: 00

SUB CODE: IE NO REF SOV: 006 OTHER: 000

Card 2/2

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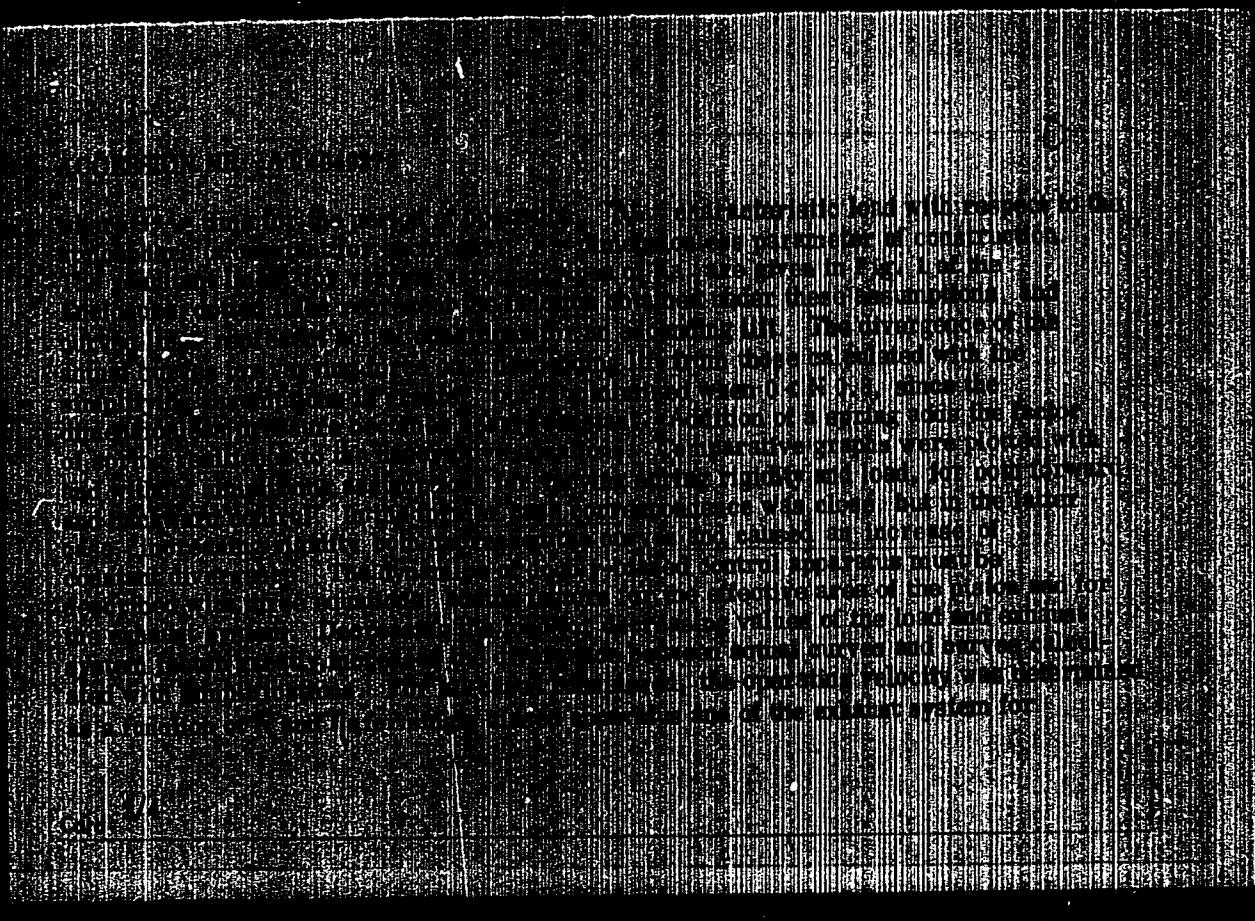


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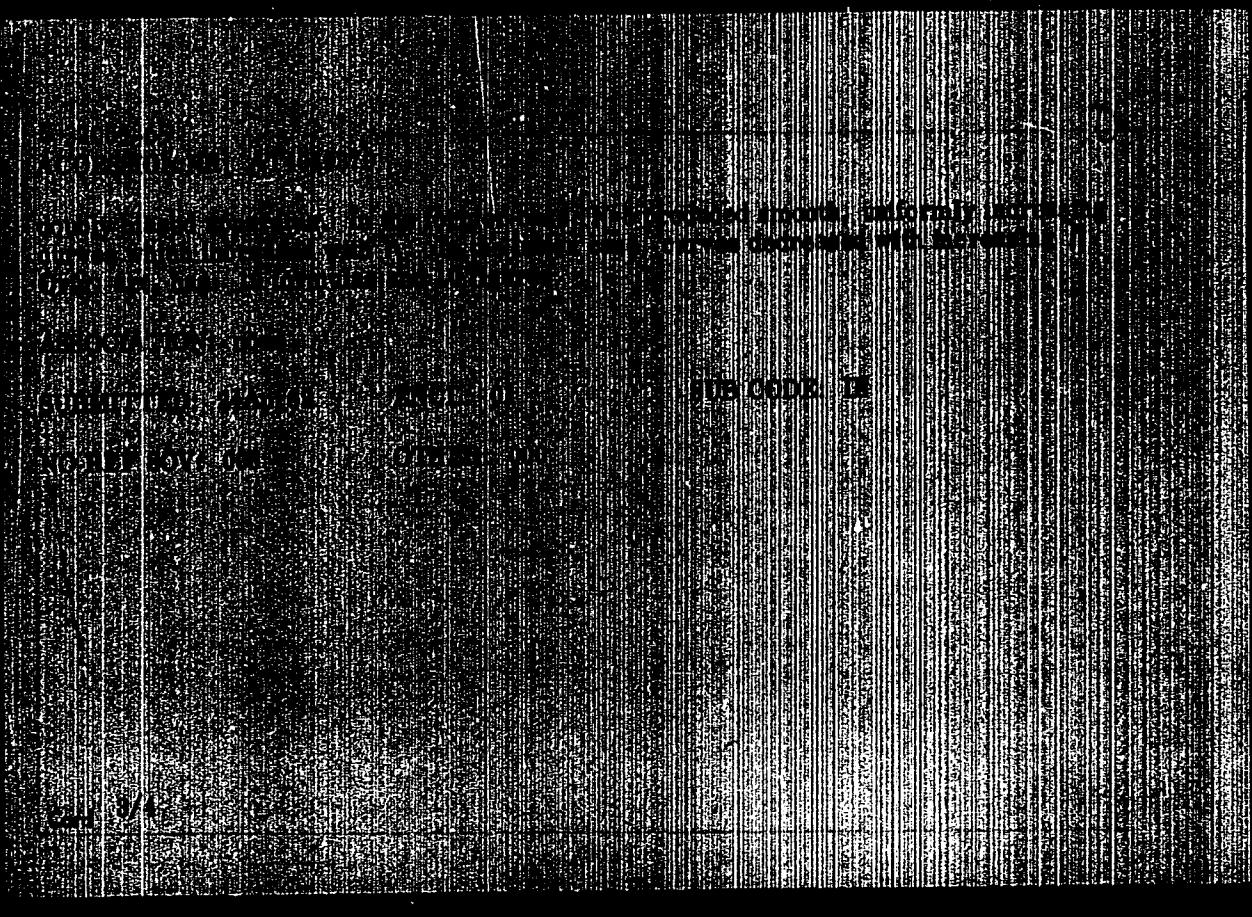


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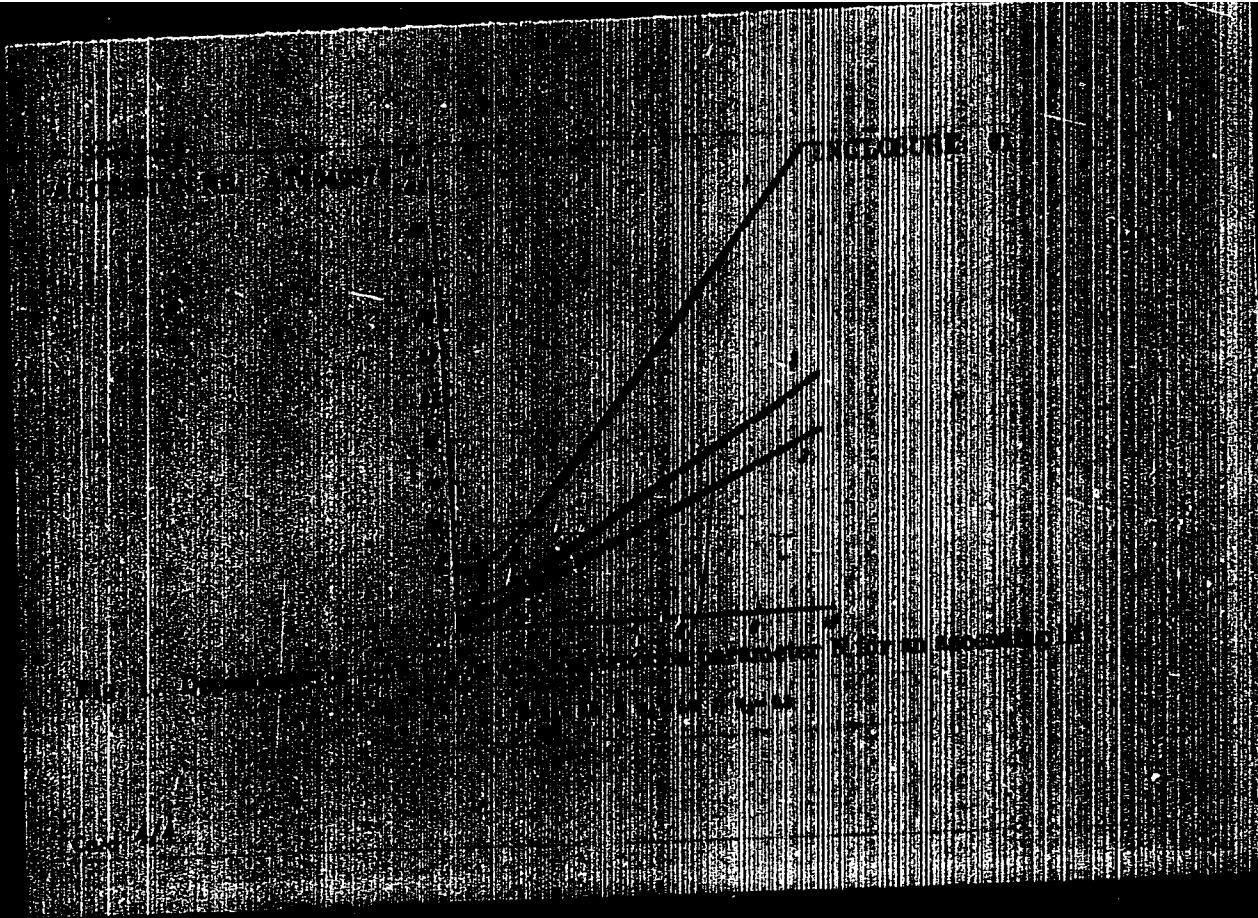


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GERTS, Ye.V. (Moskva); KREYNIN, G.V. (Moskva); FROLOV, M.L. (Moskva)

Experimental determination of the consumption ratio of pneumatic
systems. Mashinovedenie no.2:48-53 '65.

(MIRA 18:8)

GERTH, V. A.

On problems in the theory of parametric systems of automatic
control. Mashinovedenie no. 3:1966, p. 6.
(MMA 13:6)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514920015-4

REB., 1968; F. 1968, 1969

Syndicate investigation of the "Black September" plot
against Jordanian King Hussein, and its connection with
Lebanon.

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RECORDED IN THE NAME OF W. G. BROWN, JR.

IN THE CITY OF NEW YORK

ON THIS DAY

OF JUNE, 1956, AND BEFORE THE CLERK OF THE CITY COURT OF NEW YORK,

AT THE CITY OF NEW YORK, STATE OF NEW YORK, PRESENTED A CERTIFICATE OF

REGISTRATION OF THE TRADE MARK IN THE CLASS OF TRADE MARKS FOR

ALL INDUSTRIES, CONSISTING OF THE DESIGN OF A TELEGRAPHIC KEYBOARD

FOR TELETYPE EQUIPMENT, CONSISTING OF A TELETYPE CONTROL SYSTEM, TELETYPE

AND TELETYPE TRANSMITTER AND RECEIVER, AS SHOWN IN THE DRAWINGS

ATTACHED HERETO, AND CONSISTING OF A TELETYPE CONTROL SYSTEM, TELETYPE

AND TELETYPE TRANSMITTER AND RECEIVER, AS SHOWN IN THE DRAWINGS

ATTACHED HERETO, AND CONSISTING OF A TELETYPE CONTROL SYSTEM, TELETYPE

AND TELETYPE TRANSMITTER AND RECEIVER, AS SHOWN IN THE DRAWINGS

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CIA-RDP86-00513R000514920015-4"

ACC NR: AP6024363

SOURCE CODE: UR/0280/66/000/002/0059/0064

AUTHOR: Gerts, Ye. V. (Moscow); Kreymin, G. V. (Moscow); Polyakova, M. A. (Moscow)

ORG: none

TITLE: On an algorithm for the simplification of Boolean functions with the aid of a general-purpose computer

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1966, 59-64

TOPIC TAGS: ~~general-purpose computer~~, Boolean function, algorithm, approximate solution /
/ Minsk-1 ~~general-purpose computer~~ABSTRACT: An approximate method of simplifying the Boolean functions of a large number of variables specified by the constituents of the unity and zero is presented. The method is based on conversion of the Boolean function F of n variables to the relative function F^t which makes it possible to reduce the volume of scanning. This method is most effective in the case of weakly defined Boolean functions. E.g. when solving the problem with the aid of the Minsk-1 general-purpose computer and using the direct-access memory alone, the number of variables may be 30, while the number of obligatory and prohibited constituents (elementary conjunct-

Card 1/2

ACC NR: AP6024363

ions of variables determining the function and causing its value to be either 0 or 1) may be of the order of 1400. (The conversion of F to F^t is governed by the following rules: 1. From the obligatory terms α_i ($i = 1, 2, \dots, t$) of the function F some successive t -th order term is arbitrarily selected and is henceforth referred to as the base term and denoted by α_0 ; 2. Each of the terms α_i and the prohibited terms β_j ($j = 1, 2, \dots, m$) is compared with α_0 ; if the values of n letters x_p ($p = 1, 2, \dots, n$) and α_i (or β_j) coincide, 0 is entered in the table of the F^t function, but if they do not coincide, 1 is entered in that table. The rapidity of action of the algorithm depends chiefly on the power of the α_i and β_j sets. E.g. for $n = 8$ and $t + m = 258$ it takes an average of ~5 sec to obtain one prime implicant with the aid of the Minsk-1 computer. Orig. art. has: 3 tables, 12 formulas.

SUB CODE: 09, 12 / SUBM DATE: 28Jan64 / ORIG REF: 002 / OTH REF: 001

Card 2/2

ACC NR: AN6028927

Monograph

UR/

Gerts, Ye. V.; Zenchenko, V. P.; Kreynin, G. V.

Synthesis of pneumatic drives (Sintez pnevmaticheskikh privodov)
Moscow, Izd-vo "Mashinostroyeniye," 1966, 210 p. illus., biblio.
6500 copies printed.

TOPIC TAGS: pneumatic device, pneumatic logic device, automatic control design,
pneumatic control system

PURPOSE AND COVERAGE: This book is intended primarily for design
engineers and research scientists; however, it can be also used by
students specializing in machinebuilding. Structural synthesis of
discrete control systems in pneumatically operated automatic
machines by means of mathematical logic devices is presented. Pneu-
matic means for carrying out logic operations are shown in examples,
and methods of designing control systems with potential and pulse
signals are considered.

TABLE OF CONTENTS [abridged]:

Introduction -- 3
Ch. 1. Pneumatic drive and its components -- 5
Ch. 2. Realization of logic operations by pneumatic devices -- 41
Ch. 3. Synthesis of single-cycle control systems -- 65

UDC: 621.83:621.5.01

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ACC NR: AM6028927

Ch. 4. Simplifying control system design -- 86

Ch. 5. Synthesis of multicycle control systems with potential
signals -- 102

Ch. 6. Synthesis of multicycle control systems with pulse signals -- 160

Ch. 7. Synthesis of integrated control systems -- 178

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SUB CODE: 13/ SUBM DATE: 31Mar66/ ORIG REF: 077/ OTH REF: 084

Card 2/2

ACC NR: AP6035646

SOURCE CODE: UR/0280/66/000/005/0075/0080

AUTHOR: Gertsbakh, I. B. (Riga)

ORG: none

TITLE: On optimum control by incorporating redundant elements

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 5, 1966, 75-80

TOPIC TAGS: optimal automatic control, automatic control theory, time optimal control, reliability theory

ABSTRACT: A system with standby elements which can be checked only at definite periods of time is considered. The number of elements which are switched into active standby state, after each check, is selected in such a way that the probability of system failure during an assigned period of operating time is minimized. An algorithm is presented for finding the optimum policy of switching the standby elements and some of the properties of this algorithm are investigated. As an example, a five-step process with 3 elements is considered using the expressions derived. The probability of system failure during the five-step process is determined and tabulated. The probability of failure is compared for the optimum procedure and the nonoptimum procedure. The author expresses his gratitude to I. A. Ushakov for assistance in the formulation of the problem. Orig. art. has: 2 tables, 17 formulas.

SUB CODE: 09, 14 / SUBM DATE: 15Jan66/ ORIG REF: 001/ OTH REF: 001

Card 1/1

GIRTSBAKH, I.B.

Determining errors of an automatic measuring checking and sorting
machine. Izm.tekh. no.7:1-4 Jl '6'. (NIKA 15:6)
(Production control) (Measuring instruments)

ACCESSION NR: AP4041957

S/0280/64/000/003/0046/0052

AUTHOR: Gertsbakh, I. B. (Riga)

TITLE: Optimal checkout procedure of a system with multiple stages

SOURCE: AN SSSR. Izv. Tekhnicheskaya kibernetika, no. 3, 1964, 46-52

TOPIC TAGS: automatic control system, system reliability, multiple stage control system, checkout procedure, Markov process, system maintenance

ABSTRACT: The system investigated in this article consists of n stages and the reliability of each stage follows an exponential law. The first stage E_1 is working and the remainder is held in reserve. When the system is checked and stage E_1 is working, the next check is scheduled after time x_1 . If stage E_n is working the system is stopped, repaired and returned to stage E_1 . The process of transition from stage E_i to stage E_j

is a stationary Markov process with the absorption stage E_{n+1} , which indicates total failure of the system. The first check is connected with an average loss C and each failure with an average loss ℓ . The i^{th} check is connected with loss y_i . The average minimum loss column matrix Y is of the form:

$$Y = \min_X \Psi(X) + P(X)Y \quad (1)$$

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ACCESSION NR: AP4641957

where X is a vector which describes the optimal checkout procedure, $P(X)$ is the square matrix of order n of transition probabilities $P_{ij}(x_i)$ and $\Psi(X)$ is a column matrix of nonnegative functions $\Psi_j(x_i)$. It is first shown that the system of linear equations

$$Y = \Psi(X)P(X)X \quad (2)$$

has a unique solution $X^* > 0$. Then a theorem is proven which shows: a) for all $\Psi_j(x_i) \geq c > 0$ for all $x_i > 0$, $i = 1, \dots, n$, b) if $0 \leq P_{ii}(x_i) \leq 1$, $P_{ii}(0) \neq 1$, $P_{ii}(t) > 0$ with $t \neq 0$ c) if $\sum_{j=1}^{n-1} P_{ij}(x_i) < 1$ for any $i = 1, \dots, n$ and $x_i > 0$, the system of equations (1) has a unique and positive solution. Furthermore,

$$\|X - X^*\|_1 \rightarrow 0 \quad (3)$$

where $C > 0$, i.e., the solution of linear system (3) can be made to approach arbitrarily close to the minimum loss. A procedure is indicated by means of which upper and lower estimates of the loss matrix term y_i can be obtained and from which the optimum checkout intervals x_i can be estimated. "The author expresses his gratitude to

2/3

Card

ACCESSION NR: AP4041957

I. V. Romanovskiy for valuable remarks during the preparation of this paper." Orig. art.
has: 44 equations.

ASSOCIATION: none

SUBMITTED: 22Jul63

ENCL: 00

SUB CODE: IE

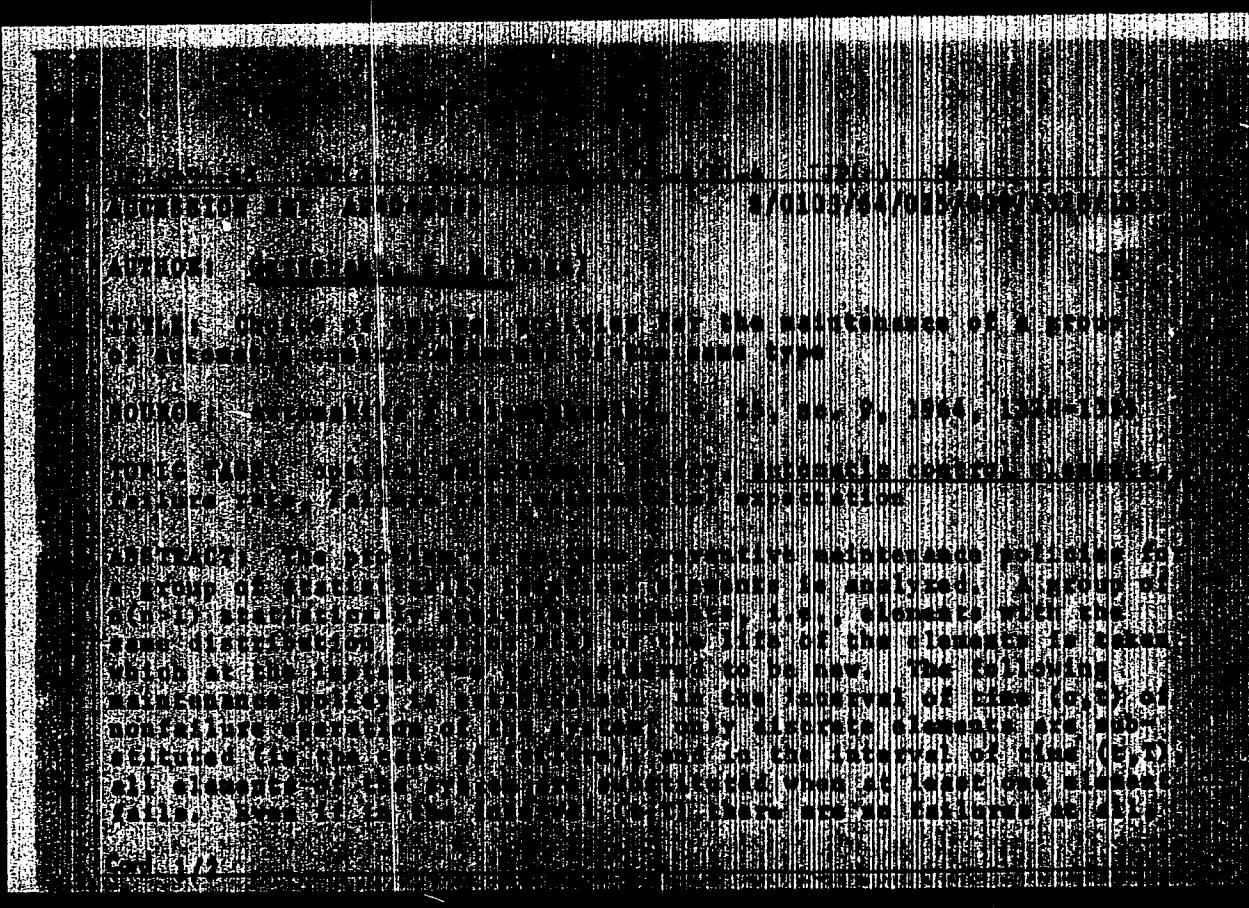
NO REF Sov: 003

OTHER: 003

Card 3/3

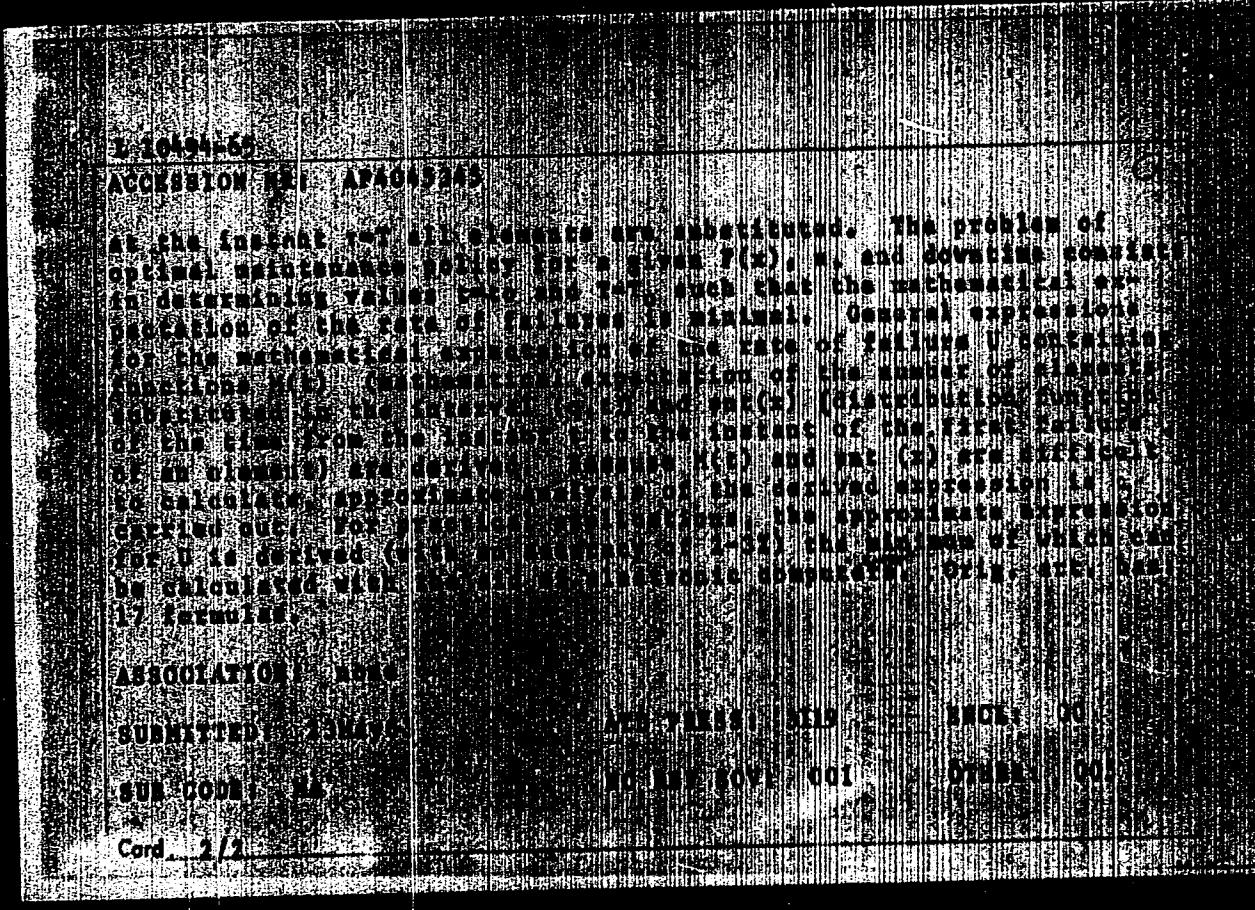
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APPROVED FOR RELEASE: 09/24/2001

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AMERICAN
COLLEGE,

1960-61

COLLEGEVILLE, PENNSYLVANIA

The author is a member of the student government association of the American College,
Collegeville, Pennsylvania.

THE AUTHOR IS A MEMBER OF THE

STUDENT GOVERNMENT ASSOCIATION OF THE AMERICAN COLLEGE, COLLEGEVILLE, PENNSYLVANIA.
THE STUDENT GOVERNMENT ASSOCIATION IS THE ORGANIZATION WHICH REPRESENTS THE STUDENTS OF THE AMERICAN COLLEGE IN ITS RELATIONS WITH THE ADMINISTRATION AND THE BOARD OF TRUSTEES.

SPLIT LETTER TO MARY ANN

PAGE TWO

GERTSENBERG, E.I.
SKOMAROVSKAYA, R.L.

Modifications of the skeletal muscular system in rheumatism. Arkh.
pat., Moskva 12 no.2:18-23 Mar-Apr 50. (CLML 19:4)

1. Of the Pathologo-Anatomical Department, Basman Hospital (Head--
Prof. Ye.Ya.Gertsenberg; Head Physician -- N.S.Shev'yakov) Moscow.

BURLAKOVA, T.I.; GERTSBERG, L.Ya.

Production of dinitroorthocresol. Khim.prom. no.9:646-648 S
'62. (MIRA 15:11)
(Cresol)

TIKHONOV A, T.I.; GERTSBERG, I.Ya.; ZUBRITSKIY, P.V.

Photometric method for determining furfurole in aqueous and
chlorobenzene solutions. Zhur.anal.khim. 17 no.2:245-247 Fr-mp
'62. (MIRA 15:4)
(Furaldehyde) (Photometry)

GLINTS'KII, I.K.

Rezh. Glint's'kiy, I.K. - rezhisor teatral'nogo fil'ma "L'nye strelki".
Prizheriv Golevogo doma. Teatral'naya ul. 14, k. 1, apt. 4.
S. 40-51

SO: Letter's! No. 33, 1949

GERTSBERG, M.O.

On so-called frontal lobe syndrome following cerebral gunshot wounds;
residual phase. Nevropat. psichiat., Moskva 20 no.5:60-63 Sept-Oct 51.
(CLML 21:4)

l. Moscow.

GERTSBERG, M.O. (Moskva)

Concerning E.K.Sepp's article on the "Localization of functions in
the cerebral cortex." Zhur.nevr. i psikh. 56 no.12:963-966 '56.
(BRAIN--LOCALIZATION OF FUNCTIONS) (MLRA 10:2)

GARTSBERG, M.O. (Moskva)

Some problems in training nonprofessional medical personnel. Fel'd.
i akush. 22 no.12:42-46 D '57. (MIRA 11:2)
(NURSES AND NURSING--STUDY AND TEACHING)

GERTSBERG, Mikhail Osipovich; MATUSEVICH, Yu.M., red.; BUL'YAYEV,
N.A., tekhn. red.

[Notes on the problem of consciousness in psychopathology]
Ocherki po probleme sozraniia v psikhopatologii. Moscow,
Medgiz, 1961. 173 p. (MIRA 15:2)
(PSYCHOLOGY, PATHOLOGICAL)

GERTSBERG, M.O., doktor med.nauk

Psychiatric aid in a somatic hospital. Nauch.trud Chetv.Mosk.
gor.klin.bol'. no.1:408-414 '61. (MIRA 16:2)
(PSYCHIATRY)

GIRTSHEV, R. Kh.

"Syndromes of Disturbed Consciousness in Cases of Central Trauma." Thesis for degree of Cand. Medical Sci. Sub 26 Sep 45, Department of Clinical Medicine, Acad Med Sci USSR.

Summary '2, 18 Dec 42, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1942. From Vechernaya Moskva, Jan-Dec 1942.

GERTSBERG, V.; KHUDYAKOV, Yu.; GOLIK, V.; ANUFRIYEV, P., inzh.;
KULAGINA, T., inzh.

A trial check of a suggestion. Sots. trud 8 no.2:115-121
F '63. (MIRA 16:2)

1. Nachal'nik byuro normirovaniya Ural'skogo zavoda tyazhelogo
mashinostroyeniya (for Gertsberg). 2. Nachal'nik byuro truda i
ekonomiki obrubnogo tsekhha Ural'skogo zavoda tyazhelogo mashino-
stroyeniya (for Khudyakov). 3. Starshiy inzhener otdela
organizatsii truda i zarabotnoy platy kombinata Kemerovoshakhtokhimstroy
(for Golik). 4. Otdel organizatsii truda i zarabotnoy platy
kombinata Kemerovoshakhtokhimstroy (for Anufriyev). 5. Otdel
truda i kadrov Upravleniya derevoobrabatyvayushchey i bumazhnoy
promyshlennosti Sverdlovskogo soveta narodnogo khozyaystva
(for Kulagina).

(Sverdlovsk--Wages--Machinery industry workers)

(Kemerovo--Wages--Mining engineering)

(Sverdlovsk--Wages-- Furniture industry)

GIRGOLAV, S.S., professor (Leningrad); LEVIT, V.S., professor (Moskva); BABCHIN, I.S., professor (Leningrad); BAKULOV, A.N., professor (Moskva); BEKERMAN, L.S., dotsent (Leningrad); VAYNSHTBYN, V.G., professor (Leningrad); GERTSBERG, V.G., professor (Kazan'); GINZBERG, M.M., professor (Moskva) [deceased]; GOTLIB, Ya.^u, professor (Moskva); DZHANELIDZE, Yu.Yu., professor (Leningrad); DRACHINSKAYA, Ye.S., dotsent (Leningrad); YELANSKIY, N.N., professor (Leningrad); KORNEV, P.G., professor (Leningrad); KOCHERGIN, I.G., professor (Moskva); LIMBERG, A.A., professor (Leningrad); LINBERG, B.E., professor (Moskva); MEZHEV, S.A., dotsent (Leningrad); NAZAROV, V.M., professor (Leningrad); OZEROV, A.D., professor (Leningrad) [deceased]; OSTEN-SAKEN, E.Yu., professor (Leningrad) [deceased]; PETROV, N.N., professor (Leningrad); POLENOV, A.L., professor (Leningrad); SAMARIN, N.P., professor (Leningrad); SHVARTS, N.V., professor (Leningrad) [deceased]; SHAMOV, V.N., professor (Leningrad); SHABANOV, A., redaktor

[Manual of specialized surgery] Uchebnik chastnoi khirurgii. Sost. I.S.Babchin i dr. Izd. 2-e, ispr. i dop. Moskva, Narkomzdrav SSSR, Gos. izd-vo med. lit-ry "Medgiz," Vol.1. 1946. 363 p. (MLPA 10;2)
(SURGERY)

GERTSBERG, V.; KHUDYAKOV, Yu.; GOLIK, V.; ANUFRIYEV, P., inzh.;
KULAGINA, T., inzh.

A trial check of a suggestion. Sots. trud 8 no.2:115-121
F '63. (MIRA 16:2)

1. Nachal'nik byuro normirovaniya Ural'skogo zavoda tyazhelogo
mashinostroyeniya (for Gertsberg). 2. Nachal'nik byuro truda i
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promyshlennosti Sverdlovskogo soveta narodnogo khozyaystva
(for Kulagina).

(Sverdlovsk--Wages--Machinery industry workers)

(Kemerovo--Wages--Mining engineering)

(Sverdlovsk--Wages--Furniture industry)

GIRGOLAV, S.S., professor (Leningrad); LEVIT, V.S., professor (Moskva); BABCHIN, I.S., professor (Leningrad); BAKULEV, A.N., professor (Moskva); BEKERMAN, L.S., dotsent (Leningrad); VAYNSHTEYN, V.O., professor (Leningrad); GERTSEBERG, V.G., professor (Kazan'); GINZBERG, M.M., professor (Moskva) [deceased]; GOTLIB, Ya.G., professor (Moskva); DZHANELIDZE, Yu.Yu., professor (Leningrad); DRACHINSKAYA, Ye.S., dotsent (Leningrad); YELANSKIY, N.N., professor (Leningrad); KORNEV, P.G., professor (Leningrad); KOCHERGIN, I.G., professor (Moskva); LIMBERG, A.A., professor (Leningrad); LINBERG, B.E., professor (Moskva); MEZENEV, S.A., dotsent (Leningrad); NAZAROV, V.M., professor (Leningrad); OZEROV, A.D., professor (Leningrad) [deceased]; OSTEN-SAKEN, E.Yu., professor (Leningrad) [deceased]; PETROV, N.N., professor (Leningrad); POLENOV, A.L., professor (Leningrad); SAMARIN, N.P., professor (Leningrad); SHVARTS, N.V., professor (Leningrad) [deceased]; SHAMOV, V.N., professor (Leningrad); SHABANOV, A., redaktor

[Manual of specialized surgery] Uchebnik chastnoi khirurgii. Sost. I.S.Babchin i dr. Izd. 2-oe, ispr. i dop. Moskva, Narkomzdrav SSSR, Gos. izd-vo med. lit-ry "Medgiz," Vol.1. 1946. 363 p. (MLRA 10:2)
(SURGERY)

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APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514920015-4"

24-10-12/26

AUTHOR: Gertsberg, Ye. Ya. (Leningrad)

24-10-12/26

TITLE: Calculation and investigation of the strength of tubular air pre-heaters. (Racchet i issledovaniye prochnosti trubchatykh vozdukhopodogrevateley).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.10, pp.74-79 (USSR)

ABSTRACT: Sections of tubular air pre-heaters represent a structure formed by two rectangular plates which are connected by means of a large number of tubes of equal diameter located near to each other. The tubes are fitted into holes which are drilled into the plates and are welded onto them at the external surface. During operation the tubes of the air pre-heaters are in the vertical position. An exact solution of the problem of the stresses and strains in the elements of the preheater section involves considerable difficulty. Ivinskiy, S. I. (Ref.1) and the author and Brodskiy, N.N. and Kazanovich, I.Z. (Ref.2) published an approximate solution, taking into account the influence of the tubes on the strains and stresses in the elements of the individual pre-heater sections. To permit obtaining an approximate solution, the authors of these papers referred to limited themselves to considering Card 1/4 sections which are supported only at the two sides and

20-10-12/2e

Calculation and investigation of the strength of tubular air pre-heaters.

assumed that the tubes are connected rigidly with the plates. This enabled reduction of the problem to the calculation of a beam which is freely supported at its edges, loaded by a uniformly distributed load and a distributed reaction moment proportional to the angle of twist of the beam section. Comparison of the calculated values of the sags of the plates and of the stresses in the tube, with experimentally determined values has shown that the approximate solution is practically applicable (Ref.2). In this paper, using the same basic assumptions, the practically more important problem is considered of the case in which the bottom tube plate is freely supported on two parallel sides, whilst on the other sides it is supported by elastic ribs; as a particular case, the solution is obtained for a section supported along four sides on rigid supports and for sections supported only on two sides. In para.1 the differential equations and the boundary problems are defined whereby the potential deformation energies in the plate, in the elastic medium and the potential energy caused by the bending of the

Card 2/4 ribs are expressed by eqs. (1.2), (1.3) and (1.4)

24-10-12/26

Calculation and investigation of the strength of tubular air pre-heaters.

respectively. The potential energy equation of the system is reduced to solving the differential equation:

$$D\Delta\Delta w - c\Delta w = q \quad (1.1)$$

with the boundary conditions as expressed by (1.7) and (1.8) where D is the cylindrical bending rigidity, w is the sag of the plate, c is the distributed reaction rigidity and q is the intensity of the distributed load. Para.2 deals with the dependence of the stresses and sags on the thickness of the tube-plate and the equations derived in this paragraph are utilized for calculating the dependence of the sags and stresses on the plate thickness for a section similar to that of a section of the air pre-heater of the boiler TΠ-170 (Fig.1, p.77). Para.3 deals with the dependence of the sags and stresses on the dimensions of the rib cross sections, the results being expressed graphically in Figs. 2, 4 and 5. Para.4 deals with the permissible stresses and also with a numerical example illustrating Card 3/4 the application of the described method for calculating

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Calculation and investigation of the strength of tubular air pre-heaters.

the strength of tubular air pre-heaters, the basic data of which are given. The permissible stresses have been determined experimentally by I. I. Brodskiy of the Barnaul Boiler Works (Barnaul'skiy Kotel'niy Zavod) by means of apparatus developed by him.
There are 5 figures and two Slavic references.

AVAILABLE: Library of Congress.

Card 4/4

GERTSHERG, Ye.Ya., kand.tekhn.nauk

Remarks on G.A. Zal'f'a article "Thermal stresses in cylinders
with a finite length." Energomashinostroenie 7 no.5:23 My
'61. (MIRA 14:8)

(Thermal stresses)
(Cylinders)

GERTSBERG, Ye.Ya., kand.tekhn.nauk

Design of the elastic support of a turbine for strength.
Energomashinostroenie 7 no.8:28-32 Ag '61. (MIRA 14:10)
(Turbines--Design and construction)

GERTSBERG, Ye.Ya.

Temperature stresses in the turbine rotor under nonstationary
operating conditions. Endymashinostroenie 8 no.2·26-28
F 162. (MIRA 15·2)
(Impellers · Testing)

ACCESSION NR: AT4010243

S/3052/63/000/003/0150/0157

AUTHOR: Gertsborg, Yo. Ya. (Leningrad)

TITLE: Theoretical and experimental investigations of thermal stresses in a solid turbine blade cooled from the shaft

SOURCE: AN UkrSSR. Institut mekhaniki. Teplovyye napryazheniya v elementakh konstruktsiy; nauchnoye soveshchaniye. Doklad*, no. 3, 1963, 150-157

TOPIC TAGS: thermal stress, turbine blade thermal stress, turbine blade cooling, turbine blade, turbine blade design

ABSTRACT: In the contemporary design and construction of power-generating gas turbines, artificial air cooling is employed in order to obtain a rotor temperature not exceeding 450-480 C, since below such temperatures rotors can be made of pearlitic steel instead of austenite. Calculations and experiments carried out at the Leningradskiy metallucheskiy zavod im. XXII s"yezda KPSS (Leningrad Metalworks) and the Tsentral'ny*y koteloturbinny*y institut im. I.I. Polzunova (Central Boiler and Turbine Institute) indicated that temperature differences of up to 200 C can arise between the shaft and tip of blades during cooling of the rotor. It is therefore necessary to determine the thermal stresses and their influence on the strength of the blade. This problem has been reduced by the

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ACCESSION NR: AT4010243

author to a thermoelastic problem for a semi-infinite flat plate of constant width and thickness, along which the temperature distribution follows a prescribed law. Three different boundary conditions at the edges of the plate have been assumed for better estimation of the probable stress values corresponding to real boundary conditions: (1) edges built-in; (2) edges free; (3) edge points can move in the η -direction, but cannot move in the ξ direction (sliding restraint) see also Fig. 1 of the Enclosure). After describing the theoretical calculations, which indicate that the edge effect rapidly decreases toward the tip of the blade, and that the magnitude of thermal stress depends substantially on the temperature gradient along the blade, the author reports the results of the experimental determination of thermal stress in a model blade (see Fig. 2 of the Enclosure) and in a commercial blade of the GT-25-700 gas turbine. The temperature distribution was determined by thermocouples and the stresses by heat-resistant strain gauges attached to the specimen. The temperature distribution obtained along the model was approximated by the equation:

$$t = -342 e^{-\sqrt{0.5} \xi} + 350;$$

across the width, the temperature variation was not more than 25°C. A better agreement between calculations and experimental results was observed for the axial stresses σ_x than for σ_y and τ_{xy} . However, the latter are smaller and have less influence on the strength of the blade. Finally, calculations were performed to determine the thermal

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1

ACCESSION NR: AT4010243

stresses in a blade of the GT-25-700 turbine, assuming a temperature distribution along the blade given by:

$$t = 115e^{-\frac{\zeta}{5}} + 675$$

which corresponds to the temperature field in a working turbine. A maximum value of 11,772 N/cm² was obtained for the equivalent stress in the shaft section including the effect of centrifugal force; the thermal stresses near the edges were found to be opposite to the centrifugal stresses in this section. "Part of the work was carried out by a group of associates at the Department of Measurement Technology of the TAKTI under the direction of Ye. Yu. Nekhendzi." Orig. art. has: 6 figures and 8 formulas.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut im. I.I. Polzunova (Central Boiler and Turbine Institute)

SUBMITTED: 00

DATE ACQ: 17Jan64

ENCL: 02

SUB CODE: AP

NO REF SOV: 002

OTHER: 000

Card

3/33

EWP(r)/EWT(d)/EWP(q)/EWT(m)/EDS
L 10784-63

ACCESSION NR: AP3001031

S/0114/63/000/005/0027/0029

52

AUTHOR: Gertsberg, Ye. Ya. (Candidate of technical sciences)

TITLE: Thermal stresses in turbine blades

SOURCE: Energomashinostroyeniye, no. 5, 1963, 27-29

TOPIC TAGS: gas turbine cooling, thermal stress, turbine blade, gas turbine

ABSTRACT: A method is presented for calculating thermal stresses occurring in gas turbine blades caused by a temperature gradient along the blade length resulting from turbine rotor cooling. It is assumed that the blade is in the form of a rectangular flat plate of a constant thickness and width, the temperature varies lengthwise only, and the modulus of elasticity and coefficients of linear expansion and heat transfer are constant. Since the length of a blade airfoil is greater than its width, a semi-infinite strip, rather than a rectangular plate, can be considered. Further analysis is based on the solution of a thermoelastic problem for a strip in which a constant temperature is maintained at one cross section and the heat transfer occurs between the upper and lower surfaces and a

Card 1/2

L 10784-63

ACCESSION NR: AP3001031

surrounding medium; the longitudinal edges of the strip are free from stresses.
The use of the method is illustrated by a numerical example. Orig. art. has: 6
formulas, 4 figures, and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 14Jun63

ENCL: 00

SUB CODE: PR

NO REF Sov: 002

CTHER: 000

Card *mes/CW*
2/2

GERTSBERG, Ye.Ya.; STARZHINSKIY, V.M.

[Statics] Statika. Moskva, Vses. zaochnyi in-t tekstil'-noi i legkoi promyshl., 1964. 163 p. (MIRA 12:4)

GERTSEN, G.A.; GUREVICH, G.R.; KUL'PIN, L.G.

Determination of the parameters of a layer based on observations
on the nonsteady linear gas flow. Trudy MINKHIGP no.29:70-80 '60.
(MIRA 13:12)

(Oil reservoir engineering)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514920015-4

Wright, C. W.; D. M. (Dad) -- "Dad and I have been talking about
you all day". "I'll speak, C. W. I'll speak", Wright (Dad, D. M.)
replies, "I }

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514920015-4"

GERTSEN, I.G., prof.; CHABANENKO, V.D.

Classification and treatment of fractures of the pelvic
bones. Ortop., travm. i protex. no.1:70-71'63.

(MIRA 16:10)

1. Iz kafedry ortopedii i travmatologii (zav. - prof. I.G.
Gertsen) Odesskogo meditsinskogo instituta (rektor - zaslu-
zhennyy deyatel' nauki prof. I.Ya. Deyneka) i Odesskoy ob-
lastnoy klinicheskoy bol'nitsy (glavnnyy vrach - K.S.
Ternovoy).

*-

VOLKOV, N.V.; GLIMSH, I.G.

13th Congress of the Orthopedists of the German Democratic Republic. Ortop., trvna. i protes. 25 no.11:91-94 II '64.
(TIN: 18:11)

IBIKIN, G.Yu., SERTSEH, K.A.

Combination thermometer and anemometer. Neuchatel, Switzerland
(MERA 12.2),
no. 15; 311-315 '64.

U.S.A., U.S.S.R. and China. This is "the situation of the conditions of work, working time, living conditions of workers, the effectiveness of management, the formation and the effectiveness of countermeasures to combat inflation, the existing work order, the mining conditions of coal, coal quality, its utilization, the use of the coal field, coal production, coal distribution, the cost of coal, the cost of

GERTSEN, P.P., inzh.

Testing cutting bars with the VUGI-KF-type watering system. Bezop.
truda v prom. 4 no. 5:19-21 My '60. (MIRA 14:5)

1. Laboratoriya po bor'be s silikozom Permskogo nauchno-issledo-
vatel'skogo ugol'nogo instituta.
(Coal mining machinery)

GERTSEN, P.P.

Cesarean section in cows in the regional veterinary hospital.
Veterinariia 36 no.7:57-56 J1 '59. (MIR 12:10)

1. Glavnnyy vetrach Novo-Sergiyevskogo rayona, Gremburgskoy
oblasti.
(Veterinary obstetrics)

Gertsen, F. F.

Cand Vet Sci - (diss) "Materials on abdominal surgery of horned cattle. (From experience in studies in the Novo-Sverdlovskiy Rayon of Orenburgskaya Oblast)." Orenburg, 1961. 19 pp; (Ministry of Agriculture RSFSR, Leningrad Veterinary Inst); 120 copies; price not given; (Kl., 6-oi sup, 1/4")

GERTSEN, P.P.

Practices in the elimination of sterility in cows. Veterinaria
38 no.8:16-18 Ag '61 (MIRA 18:1)

1. Glavnyy veterinarnyy vrach Novo-Sergiyevskogo rayona,
Orenburgskoy oblasti.

MUSTAFAYEV, I.A.; GERTSEN, P.F., kand.tekhn.nauk; ZYRYAN.V, Ye.S.

Controlling dust during the drilling of boreholes in thin stopes.
Bor'ba s sil. 5:129-131 '62. (MI... 1e:5)

1. Permiskiy nauchno-issledovatel'skiy ugol'nyy institut.
(Mine dusts—Prevention)(Boring machinery—Equipment and supplies)

SYSUYEV, V.A.; PAVLOVICH, G.A.; GERTSEN, P.P., kand.tekhn.nauk

Preventing dust and poison gases by using water stemming in
blasting operations. Bor'ba s sil. 5:147-150 '62. (MIRA 16:5)

1. Permskiy nauchno-issledovatel'skiy ugol'nyy institut.
(Blasting—Equipment and supplies) (Mine dusts—Prevention)
(Mine gases)

GERTSEN, V. Ya.

"The Red Estonian Breed of Cattle and Its Potentialities With Efficient Feeding and Maintenance of the Younger Generation." Cand Agr Sci, Moscow Agricultural Acad Imeni K. A. Timiryazev, Moscow, 1953. (R⁴nBiol, No 8, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

BLOKH, S.I., kand. sel'khoz. nauk; BORZOV, V.V., kand. sel'khoz. nauk; YURCHENKO, G.T. [IUrchenko, H.T.], inzh.-mekhanik; VOLCHOSHAR, V.A., kand. ekon. nauk; GERTSEN, Ye. I. [Hertsen, I.E. I.], kand. sel'khoz. nauk; DANILENKO, I. A. [Danylenko, I. A.] red.; SMIRNOV, O.V. [Smyrnov, O.V.], red.; NEMCHENKO, I.Yu., [Niemchenko, I.IU.], tekhn. red.

[Advanced work practices on cattle farms] Perekovi metody i raboty na fermakh velykoi rohatoi khudoby. 2., vypravlene i dop. vyd. Za red. I.A.Danylenka. Kyiv, Derzhsii'hospvydav URSR, 1963. 203 p. (MIRA 16:10)

I. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Danilenko).
(Dairying)

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GOLDENBERG, G. R.

"Electronic Voltage Regulators for Special Generators", Dissertation, VSEI
(All-Union Electrical Engineering Inst.) 1946

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CIA-RDP86-00513R000514920015-4"

Gertsenberg, G.R.

A 2 T-9

USER/Engineering
Controls
Stabilizers

Jan 1947

"A Method of Stabilizing Automatic Regulation Systems," G. R. Gertsenberg, 11 pp

"Avtomat i Telemekh" Vol VIII, No 1

The article discusses a method for stabilizing and improving the characteristics of automatic regulation systems. The apparatus discussed consists of an electronic regulator of high-frequency voltage and a power synchronism system, with 11 schematic diagrams. Experiments were conducted at the All-Union Electro-Technical Institute.

22T49

Man. All-Union Elect.-Technical Inst., c 1947.

GERTSENBERG, O.R., kandidat tekhnicheskikh nauk.

Voltage regulators for generators with increased frequency. Vest.elektro-
prom. 18 no.8:14-17 Ag '47. (MLRA 6:12)

1. Vsesoyuznyy elektrotekhnicheskiy institut.
(Voltage regulators)

GERTSANOV, G. R.

Author of the Book: "Regulation of Tension for Generators at Increased Frequency,"
Elektrichestvo, May 1948.

75T35

GERTSENBERG, G. R.

USSR/Electronics
Circuits, Electronic
Voltage Regulators

May 1948

"Highly Stable Diode Tubes in Automatic and Regulating Circuits," G. R. Gertsenberg, Cand Tech Sci, All-Union ElektroTekh Inst imeni V. I. Lenin, 7 pp

"Vest Elektro-Prog" No 5

Gives voltage regulators for AC and DC circuits, amplitude regulator, current and voltage relays, and graphical methods for calculations of circuits with aid of a 4T5M diode.

75T35

Cand. Technical Sci
Mar., All-Union Electro-Technical Inst. im. V.I. Lenin
-1947-c49-

G.R.T. (M.R.D.), G. R.

"Automatic & Pulse Semiconductors of the All-Union Electric Inst System," Vest. "Elektro-
Prom," No. 3, 1949.
Card Tech Sci, All-Union Elec Eng Inst imeni V. I. Lenin, 1949.

GERTSENBERG, I. A.

GERTSENBERG, I. A. "A short life-free biography of the author of the book 'The
Chronicles," Toklady (Armenian Ar. 33), Yerevan, Armenia, 1974,
p. 1-33, (Volume in Armenian)."

SO: 9-37y, 21 May 3, (Letter from GERTSENBERG, I. A., 1974).

BERNBERG, G. R. and SYKES, V. I.

"New apparatus for electronic automation," Elektronika elektron., No. 4, 1951.

Classification:

10-9-15/23

AUTHOR: Alekseyev, L.F., Boyarov, A.I., Engineers and Gertsenberg,
G.R., Candidate of Technical Sciences.

TITLE: An Instrument for Simulating Models of Automatic Regulation
Systems. (Pribor dlya modelirovaniya sistem avtomaticheskogo
regulirovaniya)

PERIODICAL: Vestnik Elektro promst lennosti, 1957, Vol.28, No.5,
p.53 - 59 (USSR).

ABSTRACT. It is not always advisable to use digital computers to solve problems of automatic regulation because their high accuracy is superfluous. The circuit characteristics of automatic regulation systems can often be altered somewhat without much changing the nature of the transient process and moreover, the characteristics of actual systems cannot always be determined accurately. In investigating automatic regulation systems it is necessary to select a circuit of the best structure to determine the type and place of insertion of stabilizing devices and to investigate the effect of alterations during the adjustment of the regulating system. When digital computers are used, new differential equations must be set up for each new condition, which is tedious. Moreover, the results are not presented in a form that easily gives a clear physical picture card 1/4 of the processes occurring in the regulator system. In many

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cases it is much more convenient to use an analogue computer to simulate modelling individual typical links of the given system of regulation. In the majority of cases, automatic regulation systems can be represented as a series of elementary links of the inertia, oscillatory, differentiating or other types. These links can be modelled by means of d.c. amplifiers with suitable output impedances and feed-back systems. The main advantages of the analogue system based on the principle of simulating individual typical links of the automatic regulation system are that it offers rapid and graphic solutions of problems on the selection of circuit structure on stabilising devices and on the influence of changes in the circuit constants. Moreover, the construction of the instrument is relatively simple and special mathematical treatment of the initial data is not required. If necessary, the results can be obtained on different time scales and recorded by oscillograph. The article then describes briefly the main characteristics of an instrument for simulating automatic regulation systems type ПМ-САР developed in the All-Union Electro-technical Institute in 1954-1955. Work of this kind was commenced by Doctor of Technical Sciences A.A. Fel'dman in 1956-1957 and in recent years similar work has been published abroad. The instrument, which is illustrated in Fig.1, consists

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